LEA COUNTY OPERATORS COMMITTEE P. O. BOX #1410, Port Worth, Texas February 5, 1943

An arable Part Diteringeron Honorable John J. Dempsey, Governor,

Chairman, New Mexico Oll Conservation Commission, Santa Fe, New Mexico.

Dear Sir:

On December 2, 1942, at the recommendation of the Lea County Operators Sub-Advisory and Engineering Advisory Committees and with approval of a majority of the Executive Committee, I requested that the Oil Conservation Commission of the State of New Mexico call a hearing at Santa Fe, New Mexico, on the 17th day of December, 1942, or at any other proximate date which might be more convenient to your honorable body for the purpose of hearing evidence for

- (1) The promulgation of a permanent gas/oil ratio order for the various fields located in Lea County;
- (2) The promulgation of an order, which upon proper application and presentation of sufficient evidence to protect property rights, etc. will permit the transfer of allowable from high gas/cil ratio to low gas/cil ratio wells in certain Lea County fields on an experimental basis for a limited period not to exceed one year;

and requesting that notice of hearing be sufficiently broad to permit the introduction of any evidence for or against the above proposals the operators or other interested parties might consider necessary.

Under date of December 5, the Honorable John E. Miles, Governor and Chairman of the New Mexico Gil Conservation Commission, advised that pending completion of an engineering survey being conducted by the Commission, hearing could not be held until some time in the latter part of February, 1943.

Since the above dates, the Lee County Engineering Committee has continued its study of conditions in the various Lee County fields and in order to obtain information on effects of temporary transfers of allowables that have been granted by the Commission as well as additional data involving gas/oil ratios, etc., I have been requested to ask you to again postpone hearing until the work of the Engineering Committee is completed and can be reviewed by the operators, after which we will again contact you regarding date for a hearing.

AMM:JU cc - Honorable H. R. Rodgers, Commissioner of Public Lands and Conservation Commissioner.

> Honorable John M. Kelly, State Geologist and Conservation Commissioner.

Honorable Carl B. Livingston,

Yours very truly, MA anno

A. M. McCorkle, Chairman Lea County Operators Committee

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20024Z

## UNITED STATES DEPARTMENT OF THE INTERIOR

### GEOLOGICAL SURVEY

P. 0. Box 997 Roswell, New Mexico May 20, 1943

Mr. John M. Kelly New Mexico Oil Conservation Commission Santa Fe, New Mexico

Dear Mr. Kelly:

With reference to the hearing of the New Mexico Oil Conservation Commission in Santa Fe on April 27, a brief review of our field policy on federal oil and gas leases might be informative for your consideration of the general problem. In our opinion, several progressive steps were suggested for greater conservation of the oil and gas reserves of New Mexico under Case No. 42 in the matter of the application of the Lea County Operators Committee for a permanent gas-oil ratio order for the various fields in Lea County and for a plan to permit the transfer of allowable from high gas-oil ratio wells to low gas-oil ratio wells to prevent waste and to maintain equity. No objections are offered to the applications under Cases Nos. 39, 40 and 41.

The matter of adequate control of reservoir energy in Lea County fields, particularly through gas-oil ratio limitation and gas marketing, has long been under consideration by this office in connection with our responsibilities for operations on public lands. Our experience with a large number of remedial jobs on public land wells indicates that such attempts to reduce gas-oil ratios are of only local or temporary benefit and do not substantially affect the conservation problem. Therefore, other means must be attempted to secure the benefits of production with reasonable gas-oil ratios.

Although somewhat high for some fields, this office is inclined to concur at this time with the specific maximum gas-oil ratios recommended for certain fields in Lea County by the Lea County Operators Committee with the exception of the Maljamar field as discussed hereafter. We are inclined to seriously question the recommendation that no gas-oil ratio limit be set for the Hardy, Langlie, Lynn, Mattix, Penrose, Rhodes and Skelly pools. It was stated that these fields should either be classed as stripper production from sand pays or as producers of large volumes of water from Dolomitic limestone pays, and that limitation of gas-oil ratios therein would prevent the greatest ultimate recovery of oil or cause further oper-FORMUCTORY



The recommendation with respect to the sand-pay fields is based largely on the rapid decline in reservoir pressure and the low estimated ultimate per-acre recovery. The recovery estimates are based on decline curves for production during a period when large volumes of gas were allowed to be produced with the oil. It would appear that large volumetric withdrawals of gas would contribute materially to the decline of reservoir pressure of those fields producing solely under volumetric control. Limiting the volume of gas withdrawal from the reservoirs, preferably with return to the reservoir of at least some of the produced gas should reduce the rate of decline of reservoir pressure, prolong the life of wells and increase the ultimate recovery of oil.

The Rhodes field is included among those sand fields considered as containing only stripper production. As this field has had more active drilling operations in the past year and a half than any other field in Lea County, including a substantial number of oil wells completed in secs. 21, 27 and 28 in T. 36 S., R. 37 E., we are unable to concur in the contention that the Rhodes field is in the stripper stage of production. Perhaps this field may be placed in a special class subject to the operating practices necessary to attain the conservation objectives of the unit agreement now under consideration.

As to recommended gas-oil ratios for individual fields, we do not approve of ratios exceeding 2,000 cubic feet per barrel on federal lands in the Maljamar area for the reasons that the current, average ratio is only 900, any ratio exceeding the suggested maximum will be highly detrimental to efficient operation of the Maljamar repressuring project, and very probably, excessive ratios can be improved by simple remedial work or production technique.

We have had under consideration for some time, the possibility of making effective on public lands limitations of gas-oil ratios above which a well would be classified as a gas-well, rather than as an oil well subject to gas-oil ratio penalty. A gas well in such classification would be allowed to produce only in cases where at least that volume of gas in excess of the maximum gas-oil ratios is marketed for complete utilization. Oil production would be restricted so that no more would ? be produced than the equivalent of an adjusted penalized oil allowable based on maximum gas-oil ratios.

The determination of a maximum gas-oil ratio for classifying any producer as a gas well might well be based on a definite figure between 15,000 to 30,000 cubic feet per barrel for all Lea County fields. A more equitable basis might provide for a multiple of the maximum allowable gas-oil ratio set for each field for penalty adjustments, say, four or five times the field allowable ratio. To make such an arrangement workable, each and every field should have a definite allowable gas-oil ratio with no fields exempted. We are in accord with the principal of transfer allowables from high gas-oil ratio wells to low gas-oil ratio wells and see no objection in limiting the area for such transfers to 200 acres on the same basic lease. In fairness to all operators there should be some limitation to the shape of such transfer area, otherwise, the area could be made of five 40-acre tracts in line, the length being five times its width and adversely affect drainage from several adjoining property holders. On a number of public land leases, this provision could adversely affect State or fee lands. We would prefer that the transfers be approved only as to tracts that are as nearly square as possible, the length of such area not to exceed twice its width.

Transfers of allowables undoubtedly would be more successful where allowables are divided among the greatest number of wells. This would tend toward greater equalibrium in reservoir conditions and prevent excessive withdrawals from limited areas with resultant increase in drainage and spreading local gas caps or high gas-oil ratio conditions. This consideration leads to the opinion that no limitation of the transfer of allowables should be fixed for unitized areas. To encourage the possible benefits of transfer of allowables, provision might be made that waiver of the 200-acre restriction is obtainable only for areas completely unitized containing 640 or more acres. The benefits from such units could greatly exceed those obtainable from the smaller 200-acre transfer allowable areas.

As to the volume of oil that may be transferred, we feel the only equitable basis is for transfer of the adjusted or penalized allowable of a well. There are too many possibilities of inequities if transfer of full allowables were permitted.

These thoughts and suggestions are being offered for your consideration in connection with any orders that the Commission may issue on the basis of the hearing of April 27. We would be glad to discuss these matters further with you at any convenient time or place. Every additional barrel of oil gained in ultimate recovery and every cubic foot of gas utilized, and not blown to the air, whether from State, fee or public lands, will contribute more to the public good and to the State of New Mexico.

Very truly yars,

ERNEST A. HANSON, Supervisor, Oil and Gas Operations.

Those in Attendance of Hearing on april 27th, 1943

Company

name R.E. Adams D. C. ALGERS W. D. Mitchert G. H. GRAV Floyd Brett HERE? 87 Shiplot St. Holen 1 Her P. Lireimie Francis Mam Neville 6 Penrose. Glenny Maley Seo Jrig Rus Office DRMcReithau Sim C. Nae Beary W Selinger 1 9. Auguerey E.H.Griswold RVan a mills alaim Workham Bert John 6. a Scheurich ( )n 1/1 Conscle Wh Basie Copas prans Alset Fur Shepard Roll yahrough Willion Freiter Service ( 10 FRED M. Harring

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## VIL CONSERVATION COMMISSIC' SANTA FE, NEW MEXICO



October 5, 1943

Mr. Glemn Staley Promation Office Hobbs, New Mexico

Re: Order No. 546

Dear Glenn:

In the future in order that the Commission may have a fair and accurate check on all tests taken in conjunction with the transferring of allowable under Order No. 546, the Commission hereby directs your office to witness each and every test and to file with the Commission the original of these tests and file with the operators involved copies in order that they may attach these copies to their application form.

It will be appreciated if you will notify all operators by circular letter as to this change in procedure in order to avoid future delays when the operators file for transferring under Order 546.

Very truly yours,

John M. Kelly Director

JMK:MS

### August 23, 1944.

Mr. A. M. McCorkle Stanolind Oil and Gas Company Fort Morth, Texas

Dear Mr. MoCorkle:

Referring to the Lea County gas-oil ratio better:

The records and files if the di Conservation Commission have been examined, and I find the following:

The first gas-oil ratio order is dated January 13th, 1940, and is Order No. 238. A companion order, adopted the same day, No. 237, provides the method of making gasoil ratio tests or mecurements.

By Order No. 250, dated March 27th, 1940, and effective April 1st, 1940, Order No. 238 of January 13th, 1940, was amended or replaced, but this Order No. 250 in no way affected Order No. 237, governing the method of making gasoil ratio tests.

The next order is No. 545 which was adopted July 27th, 1945, and was effective August 1st, 1943. This order was the result of a heating held April 27th, 1943.

This Order No. 545, which is still in effect, fixes the gas oil ratios for the various pools or areas, and provides with reference to gas-oil ratio tests (Paragraph 1 (1), as follows:

The Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time.

This Order No. 545 is applicable only to Loa County. It expressly repealed Order No. 250, above referred to, except for fields in Eddy County, and also repealed Order No. 237, above referred to. Mr. A. M. McCorkle

-2-

You will probably recall that the Lea County Operators' Committee, after much discussion, made written recommendations to the Oil Conservation Commission and put on testimony to support its recommendations.

Paragraph 5 of these recommendations is as follows:

5. That testing procedure for dessuring gasoil ratios, appended hereto de Hachibit "B", be adopted as Rules and Regulations of the Commission and not included as part of the gas-oil ratio order.

The Exhibit "B" referred to in this recommendation of the Committee sets out the testing procedure appearing on pages two and three of the final potort of the Engineering Committee of the Lea County Operators' Committee, which was sent to all operators by Mr. Staley on April 12th, 1943.

While the Operators recommended the adoption of this Exhibit "B", the precedure set out in such Exhibit was not formally adopted by the Commission

By recollection is that all parties intended to leave the testing providure as flexible as possible, and to have such procedure adopted in such form that changes might be made in the testing procedure by the Commission without the necessity of notice and formal hearing. This seems to be the intent of the Committee as appears from the above quoted provision of Order No. 545.

while the procedure outlined in Exhibit "B" of the recommendations of the Operators' Committee to the Commission was not formally exopted by the Commission, it is probable that it ar some modification of it is the procedure that has since been followed. It seems to me, therefore, that the matter of the times for taking gas-oil ratio tests, the procedure for taking such tests, and whether such tests shall be made by the operators themselves or by the Commission, are all matters which can be prescribed by a regulation of the Commission made without any notice or hearing.

Very truly your Molech

JOS:CB oo - C. G. Staley John M. Kelly

## LEA COUNTY OPERATORS COMMITTEE

HOBBS, NEW MEXICO

August 10, 1944

Mr. John M. Kelly Oil Conservation Commission Santa Fe, N.M.

Dear John:

I am enclosing herewith copy of a letter from Mr. Peterson of the Stanolind Oil & Gas Company, which is self-explanatory.

In Case No. 42 Order No. 545 Sec. 1 Sub-head L is the following:

"The Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time."

I think what Mr. Peterson has in mind is a copy of the Commission's order or regulation directing the operators to take gas-oil ratio tests every six months, under the authority given it under Sub-head L.

As I remember, somewhere in the testimony presented to the Commission at one of the gas-oil ratio hearings the operators advocated that a survey be made under the supervision of the Cil Conservation Commission once every six months but I don't have any record of such an order or directive having been issued by the Commission. Will appreciate it very much if you will send me a copy of such order so that I can distribute it to the operators.

With kindest personal regards, I am,

Glenn Staley

GS:M

cc: L.F. Peterson

STANOLIND OIL & GAS COMPANY

Fair Bldg.

Ft. Worth, Texas

August 7-1944

Mr. Glenn Staley Hobbs, N.M.

Dear Glenn:

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In reviewing the recent correspondence and minutes of the various meetings regarding the gas-oil ratio rules for New Mexico, it is brought out that present rules provide for a cemiannual gas-oil ratio survey. We have checked our records completely and can not find the specific order of the Conservation Commission which provide for a semi-annual gas-oil ratio survey. Will you please furnish us with a copy of the order and rule which provides for this regular survey. It is hoped that we can attend the forthcoming Operators Meeting in Hobbs since we have several matters that we want to discuss with you.

Yours very truly,

J.H. Moyar

(Sgd) L.F. Peterson

# SANTA FE, NEW MEXICO

April 5, 1943 The Santa Fe New Mexican Canta Ne, New Mexico Hobbs Daily News-Sun Hobbs, New Mexico Current-Argus Carlsond, New Mexico Re: Case 10. 42 Publication etice 202 Gentlemen: Please / publish the viclosed votice once, immediately. Please proof read / the notice car fully and send a copy of the paper carrying such notice. UPON DEPENTION OF Y/ PUBLICATION, PLEASE STED PULLISHER'S\_AFFINAND For payment please submit statement in duplicate accompanied by voucher executed in duplicate. The vouchers must be signed by a notary in the space provided on the back of the voucher. The necessary voucher blanks are enclosed. Very truly yours, John . olly Director By Chief Clerk & Legal Advisor

CONSERVATION COMMISSION SANTA FE, NEW MEXICO

April 10, 1943 Fr. A. H. McCorkle, Chairman Lea County Operators Committee Y. U. Box 1410 Fort Worth, Texas Ro: Case Ro. 42. angeyont gas-dill ratio order with allowable for any was-oil ratio wells to be taken from low Kak-on ratio wells. Dear r. DeCorkle: The hearing apon your printing in the above captioned Surify, together with other matter is set for AV A.... cases, at Janta if For the purpse the Commission sits in its quasi-judicial capacity. Nou should, therefore, be prepared to present your case with such sworn testimony and documentary evidence in suggest of your petition as you may dee advisable With kindest personal reverse. tere truly yours, John D. Kelly Sime tor - 7

Chief Clerk & Legal Advisor

COL:NS cc J. C. Seth "A gas-oil ratio test shall be made by the operator for each newly completed well within 30 days after completion, and on all producing wells at least once each year. Any well not tested in the prescribed manner and whose test is not filed within the year. (beginning January 1, 1945) will be dropped from the proration schedule until satisfactory gas-oil ratio test has been filed with the Commission.

"Any well that cannot be tested during the prescribed period for mechanical or other reasons shall be referred to the Commission for special consideration and rules."

### LEA COUNTY OPERATORS COMMITTEE

DRAWER I HOBBS, NEW MEXICO January 16, 1946

Mr. R. R. Spurrier State Geologist Santa Fe, New Mexico

Dear Dick:-

Subject: Official G.O.R. tests, 1945.

I have your letter of January 10, regarding Commission Order #545, as it pertains to the filing of gas oil ratio tests on all wells in Lea County, for the year 1945.

In response to your request we are making a tabulation of all official ratios that have been filed with this office. This tabulation will be checked with the Commission office here in Hobbs, and your office in Santa Fe can check it with your files to see that no wells on which ratios have been taken have been omitted. When this is complete, a list of the companies and their wells, who have furnished no evidence to your office as having made gas oil ratio tests can be compiled, then such action as you deem necessary can be taken.

In the meantime no well will be removed from the proration schedule, as requested in your letter of January 10.

Very truly yours,

Glenn Staley

GS/gi cc: Mr. S. G. Sanderson

### - CONSERVATION COMMISSION SANTA FE, NEW MEXICO

January 10, 1946

Mr. Glenn Staley Proration Office Hobbs, New Mexico

Dear Glenn:

Pursuant to Order 545, Section 1, subsection (1) - directions governing gas-oil ratio surveys in New Mexico, read in part as follows:

"Any well that cannot be tested during the prescribed period shall be referred to the Conmission for special consideration and rules. Any well not tested in the prescribed manner and whose test is not filed at the prescribed time will be dropped from the proration schedule until satisfactory gas-oil ratio test has been filed with the Commission".

With your kind indulgence I am requesting a list of operators who have complied but also request you do not drop from the proration schedule any operator who is in default until the list is compiled.

It may be that because of the shortage of labor some operators have been unable to take proper tests. We do not wish to unfairly penalize.

Very truly yours,

RRS:MS

May 16, 1945

Honorable Glenn Staley Proration Office Hobbs, New Mexico

> He: Order 545 - Section 1, sub-section (1). Gas-oil ratio tests - amendment No. 1

Dear Mr. Staley:

This is to advise that the Commission at its executive meeting on May 14, 1945, adopted Lea County Operators Committee's recommendation of OpenX17, 1945, amending that part of "Directions Governing Gas-Cil Ratio Surveys in New Mexico" designated "Required Tests", by inserting in lieu of the matter under the latter caption the following:

> "A gas-oil ratio test shall be made by the operator for each newly completed well within 30 days after completion, and on all producing wells at least once each year. Any well not tested in the prescribed manner and whose test is not filed within the year (beginning January 1, 1945) will be dropped from the promation schedule until satisfactory gas-oil ratio test has been filed with the Commission.

"Any well that cannot be tested during the prescribed period for mechanical or other reasons shall be referred to the Commission for special consideration and rules."

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS cc Foster Horrell

## LEA COUNTY OPERATORS COMMITTEE

HOBBS, NEW MEXICO

May 1, 1945

Hon. Carl Livingston Santa Fe, N.M.

Dear Carl:

Just returned to the office from a brief absence and find your letter of the 25th. regarding my letter to the Commission relative to gas-oil ratio survey.

The "master sheet" referred to will be kept up by this office merely for the convenience of the operators and the Commission in determining at a glance what wells have furnished gas-oil ratios throughout the year rather than having to wade through the records of each individual well.

Best regards.

Yours very truly,

Glenn Staley

GS:M

# IL CONSERVATION COMMISSIC



April 25, 1945

AIRMAIL

Honorable Glenn Staley Proration Office Hobbs, New Mexico

### Re: Gas-Oil Ratio Surveys in New Mexico -Directions

Dear Glenn:

Reference is made to your recommendations of April 17 of changes in the above captioned matter. In the last paragraph you state: "The writer also suggests that a master sheet be made up listing all oil wells in Lea County, the gas-oil ratio and the date it was taken. This tabulation shall be supported by Gil Conservation Commission Form 116 and meter chart."

Please be more explicit as to what you mean by a "master sheet"; what it should contain and the necessity for the Commission to maintain such at Santa Fe. What could be better than the C-ll6 report itself which is filed by company index? A duplicate also goes to Les County Operators.

One of the difficulties with which the Santa Fe Office is confronted is sufficient time for a very small staff to do the many things that must be done.

I shall be grateful to you for your ideas and suggestions in this matter.

Kindest personal regards.

Very truly yours.

Chief Clerk & Legal Adviser

## LEA COUNTY OPERATORS COMMITTEE

### HOBBS, NEW MEXICO

April 17, 1945

New Mexico Oil Conservation Commission Santa Fe, N.M.

### Gentlemen:

On January 16, 1945 your Commission issued regulations governing gas-oil ratio tests on all producing oil wells in Lea County. Under sub-head "Required Tests" the regulation reads as follows:

"A gas-oil ratio test shall be made by the operator for each newly completed well within 30 days after completion, and on all producing wells once each year in accordance with the following schedule:

> JANUARY, FEBRUARY OR MARCH: Arrowhead, Corbin, Eaves, S. Eunice, Vacuum

APRIL, MAY OR JUNE: Eunice, Skaggs, Lovington, S. Maljamar, W. Eunice, W. Lovington

JULY, AUGUST OR SEPTEMBER: Monument, N. Lynch, N. Maljamar

OCTOBER, NOVEMBER OR DECEMBER: Halfway, Hobbs, Lynch, Maljamar

Any well that cannot be tested during the prescribed period shall be referred to the Commission for special consideration and rules. Any well not tested in the prescribed manner and whose test is not filed at the prescribed time will be dropped from the proration schedule until satisfactory gas-oil ratio test has been filed with the Commission."

This schedule was made up and presented to the Commission by a committee appointed by the Lea County Operators Engineering Committee on January 8, 1945.

Due to the shortage of equipment and manpower, it is extremely difficult (and in some cases almost impossible) for the operators to follow this schedule. In order that all regulations of the Commission be complied with as closely as possible, the writer suggests page 2

that the above section be changed to read as follows:

"A gas-oil ratio test shall be made by the operator for each newly completed well within 30 days after completion, and on all producing wells at least once each year. Any well not tested in the prescribed manner and whose test is not filed within the year (beginning January 1, 1945) will be dropped from the proration schedule until satisfactory gas-oil ratio test has been filed with the Commission. W

Any well that cannot be tested during the prescribed period for mechanical or other reasons shall be referred to the Commission for special consideration and rules.

The writer also suggests that a master sheet be made up listing all oil wells in Lea County, the gas-oil ratio and the date it was taken. This tabulation shall be supported by Oil Conservation Commission Form 116 and meter chart.

All other sections of the gas-oil ratio regulations to remain in their present form.

Yours very truly, Glenn Staley

GS:M

cc: S.G. Sanderson

## NEW MEXICO OIL CONSERVATION COMMISSION

GOVERNOR JOHN J. DEMPSEY GHAIRMAN LAND COMMISSIONER H. R. RODGERS MEMBER STATE GEOLOGIST JOHN M. KELLY SECRETARY



DIRECTOR JOHN M. KELLY

ADDREES ALL COMMUNICATIONS TO THE DIRECTOR

Santa Je, New Mexico

January 16, 1945

Crder 545, Section 1, sub-section (1):

"The Gas-Oil Ratic Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time."

Hr. Glenn Staley Proration Office Hobbs, New Mexico

Dear Glenn:

The suggestions submitted by you as representing a subcommittee of the Lea County Operators Committee at the hearing of the Commission on January 8 relative to manner and means of taking and reporting gas oil ratios to comply with Commission Order No. 545 have been reviewed.

The Commission hereby accepts your recommendations as the proper and official procedure for taking and reporting gas oil ratios. Also the ratios in the various fields will be taken as outlined in your suggestion.

As soon as possible the Commission will have the necessary forms printed and sent to you for distribution to the operators.

In accordance with the above captioned provisions of Order 545 these directions become effective as of January 15, 1945.

Verv. truly yours M. Kelly irector.

## GAS-OIL RATIO SURVEYS IN NEW MEXICO Function in the Conter 523, See the London surveys (1):

gas-oil ratio surveys in New Mexico.

Each well shall be permanently equipped to make a gas-oil ratio test at any time. Gas-oil ratio tests shall be made by persons qualified by training and/or experience. All gas measurement charts and gas-oil ratio calculations (shall be filed with the Conservation Commission) or (will be kept on file and available to the Conservation Commission for a minimum period of one year).

### MANNER OF TESTING:

Produce each well in the normal operating manner and at the customary production rate for a stabilization period of 24 hours immediately previous to a 24 hour test period. Measure all (oil, gas and water) or oil and gas) produced during the test period. For gas lift or jetted wells the total volume of gas to be used in computing the operating gas-oil ratio is the total output volume minus the total input volume.

#### LIQUID MEASUREMENTS:

Stock tanks shall be gauged to the nearest 1/4 inch. Tanks shall be thiefed immediately before and after the test and water percentage determined in accordance with A.P.I. specifications. The net oil volume shall be equal to the total liquid volume less the volume of basic sediment and water. Fluid level in the separator shall be the same at the beginning and end of the test period. Where a flow tank is used for the separation of water from the oil, the water-oil level shall be the same at the beginning and end of the test period. The computations for all liquid measurement shall be reduced to the barrels of 42 US gallons and be carried to the second decimal point.

### GAS MEASUREMENTS:

(1) For computing the volume of all gas produced the standard pressure shall be 10 oz. above an assumed atmospheric pressure of 14.4 pounds per square inch, the standard temperature 60° F, and standard specific gravity 0.85. Where gas measurements are made at abnormally high pressures, the gas volume shall be adjusted for deviation from Boyles Law. Gas volumes shall be computed in cubic feet and gas-oil ratios in cubic feet per barrel of oil. Only recording type gas measuring devices shall be used. Orifice well testers and orifice meters are approved measuring devices. Side pressure test nipples are only approved for measuring volumes beyond capacity of approved orifice equipment. Where necessary to measure gas at abnormally high pressures, a recording pressure gauge shall be installed on the separator. The measured gas volume shall be increased by the measured or estimated gas volume to the stock tanks. Estimated gas volumes shall be computed from amount of gas in solution in the oil at the separator pressure.

**REQUIRED TESTS:** 

A gas-oil ratio test shall be made by the operator for each newly completed well within 30 days after completion, and on all producing wells once each year in accordance with the following schedule:

JANUARY, FEBRUARY OR MARCH: Arrowhead, Corbin, Eaves, South Eunice, Vacuum

APRIL, MAY OR JUNE: Eunice, Skaggs, Lovington, South Maljamar, West Eunice, West Lovington

JULY, AUGUST OR SEPTEMBER: Monument, North Lynch, North Maljamar

OCTOBER, NOVEMBER OR DECEMBER: Halfway, Hobbs, Lynch, Maljamar

Any well that cannot be tested juring the prescribed period shall be referred to the Commission for special consideration and rules. Any well not tested in the prescribed manner and whose test is not filed at the prescribed time will be dropped from the proration schedule until satisfactory gas-oil ratio test has been filed with the Commission.

### SPECIAL TESTS:

May be taken at the option of the operator or ordered by the Commission, and such tests shall be so designated on the reporting form.

### CLASSIFICATION OF WELLS:

A well not capable of making top allowable during the test period shall be classified as a marginal well.

per Bbl.

## NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO REPORT

OPERATOR						FIELD					
Address						Month of				194	
Requir	ed Tes	st	Speci	al Test		(Check	one)				
		separat se side	e report )	; fo <b>r e</b> a	ich wel	1 - See	instr	uctions	on		
LEASE	Well No.	Date of Test	Pro- ducing Method	Choke Size	Test Hrs.	Daily Allow. Bbls.	Water	DURING Oil Bbls.	Gas	G.O.R. Cu.Ft.	

(I hereby certify that the information given is true and correct.)

Date \_\_\_\_\_

(Company)

By: \_\_\_\_\_

(Title)

(To be printed on base of gas-oil ratio form 2-136)

### INSTRUCTIONS

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Mail original to Oil Conservation Commission, Santa Fe, New Mexico, and one copy to Lea County Operators, Hobbs, New Mexico.

This report shall be mailed to the Commission on or before the 15th day of the month following the three-month period in which the well is scheduled to be tested. The ratios, as reported, shall become effective for proration purposes the first of the month following the end of the quarter in which the test is scheduled to be made. Failure to make the required test and report will be penalized as the Commission's Regulations provide.

Report each well separately. Under "producing methods," show flowing, pumping, or gas lift. Under "hours," show the duration of the test in hours, which includes all time the well is open for production of oil or gas during the 24-hour test period. The "allowable" is the daily allowable for the well at the time of the test.

METHOD OF TESTING: Produce each well in the normal operating manner and at the customary production rate and measure all gas, oil and water produced during 24 hours.

MEASUREMENTS shall be made in accordance with the directions of the Commission offective Januar, 19, 2000. In computing the gas-oil ratio on gas lift wells, input is subtracted from output to obtain net gas volume.

REQUIRED TESTS: On newly completed wells - within 30 days after completion. On all producing wells, once each year in accordance with the following schedule:

JANUARY, FEBRUARY OR MARCH: Arrowhead, Corbin, Eaves, South Eunice, Vacuum

APRIL, MAY OR JUNE: Eunice, Skaggs, Lovington, South Maljamar, West Eunice, West Lovington

JULY, AUGUST OR SEPTEMBER: Monument, North Lynch, North Maljamar

OCTOBER, NOVEMBER OR DECEMBER: Halfway, Hobbs, Lynch, Maljamar

SPECIAL TESTS: May be taken and so designated on this form.

REMARKS:

### IL CONSERVATION COMMISSIO" SANTA FE, NEW MEXICO

January 18, 1945

AIRMAIL SPECIAL DELIVERY

Honorable Glenn Staley Proration Office Hobbs, New Mexico

Dear Glenn:

You will note that the words "rules and regulations" have been replaced by the word "directions". The reason for this is that the Oil Conservation Act provides that no rule or regulation may be changed or adopted without hearing after advertising etc.

Order 545 which is the present Lea County Gas-Oil Ratio Order, at Section 1, Sub-section (1) gives the Commission considerable discretion and latitude with regard to gas-oil ratio tests by providing:

"The Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time".

Therefore, the directions which you termed as "rules and regulations" are in fact simply directions of the Commission and are designated as directions so as to preclude confusion by the use of the term "rules and regulations" which can only be changed at a hearing. The Commission may give its directions from time to time without hearing within the provisions of the latitude provided in the quoted portion of the letter. I explained the above matter to John who authorized me to make the change. He in turn was to explain the matter to you when he reached Hobbs and show you a duplicate of the corrected copy enclosed, but by phone today he informed me he had not received

### L CONSERVATION COMMISSION SANTA FE, NEW MEXICO

Glenn Staley

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1-18-45

the airmail, special delivery letter containing corrected copy. Therefore, you are being sent one directly. John had stated that you were preparing to mimeograph these directions and send them out to the operators. I therefore deemed it advisable that the correction referred to be placed in your hands as soon as possible.

With kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

### IL CONSERVATION COMMISSIO\* SANTA FE, NEW MEXICO

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January 18, 1945

AIRMAIL

Mr. Glenn Staley Proration Office Hobbs, New Mexico

Re: Form C-116 - Gas-oil ratio tests

My dear Glenn:

Requisition was made with the State Purchasing Agent yesterday for 10,000 copies of the above captioned form with the request that delivery be made to the Proration office where distribution is to be made and for delivery of corrected proof to you. Enclosed is a copy of Form C-116 that accompanied the requisition which the purchasing agent will send to the printer when the contract is awarded. The copy enclosed for you is for comparison.

With kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

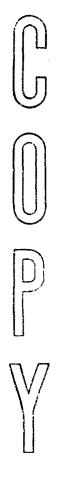
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Glenn Staley - I have one matter I would like to discuss. A matter the Commission heard under Commission Order No. 545, adopted July 27, 1943. The Commission asked the Operators to make suggestions in the matter of procedure to be followed in taking Gas-Oil ratios in New Mexico, not in any way changing the order, but to comply with the order, and due to the shortage of man-power on the part of the Commission and Operators, the Commission has asked for suggestions for the handling of our problem in taking Gas-Cil ratios. So the Operators appointed a committee, and this that I am presenting is the report of that Committee, which is merely suggestions to the Commission as to the taking of Gas-Oil ratios in the time in which the ratios from the various fields shall be in the hands of the Commission and the manner in which they shall be reported to the Commission.

# L CONSERVATION COMMISSIO



January 16, 1945

Dear John:

Wherever "rules and regulations" were mentioned the word "directions" has been substituted in order to preclude confusion as to what may be changed without a hearing under authority of Order 545, Section 1, sub-section (1).

Inasmuch as Glenn is to mimeograph the directions and in order to preclude confusion, enclosed is a corrected copy of the directions.

The requisition for the printing of 10,000 copies of Form C-ll6 with instructions printed on the back thereof is being put through the purchasing Agent's office today with request that they be printed by the Hobbs New Sun.

Regards,

# TIL CONSERVATION COMMISSIC



January 16, 1945

Order 545, Section 1, sub-section (1):

"The Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time."

Mr. Glenn Staley Proration Office Hobbs, New Maxico

Dear Glenn:

The suggestions submitted by you as representing a subcommittee of the Lea County Operators Committee at the hearing of the Commission on January 8 relative to manner and means of taking and reporting gas oil ratios to comply with Commission Order No. 545 have been reviewed.

The Commission hereby accepts your recommendations as the proper and official procedure for taking and reporting gas oil ratios. Also the ratios in the various fields will be taken as outlined in your suggestion.

As soon as possible the Commission will have the necessary forms printed and sent to you for distribution to the operators.

In accordance with the above captioned provisions of Order 545 these directions become effective as of January 15, 1945.

Very truly yours,

John M. Kelly Director.